



Clean Version of Corrected Claims 84-183."

method of transmitting a message through the internet from a sender to a recipient through a server displaced from the recipient, including the steps at the server of:

receiving the message at the server from the sender,

transmitting, through the internet from the server to an agent of the recipient, the

5 message, an identification and an internet address of the server and the identity of the sender of the message,

receiving from the agent at the server through the internet the identity and address of the agent and an indication of the receipt by the agent of the message and the identification and internet address of the server and the identity of the sender, and

10 sending to the sender from the server through the internet a copy of the message and the information received by the server from the agent and a digital signature of the message received by the server from the agent of the recipient.

86. A method as set forth in claim 84 wherein

the server identifies any attachment to the message and wherein

the identity of the attachment is received by the server through the internet from the

agent and wherein

5 the server sends to the sender through the internet a copy of the attachment received from the agent and a digital signature of the attachment.

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87. A method as set forth in claim 84 wherein

a digital signature of the message is provided at the server by a plurality of digits
in a unique sequence and is sent by the server to the sender.

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90. A method of transmitting a message through the internet from a sender to a

recipient through a server displaced from the recipient, including the steps at the server of:

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receiving the message at the server from the sender,

transmitting from the server through the internet to an agent of the recipient the

5 message and the identity and internet address of the server and an indication representing
the identity of the sender,

receiving at the server from the agent a handshaking and delivery history of the
message from the server to the agent, and

transmitting from the server to the sender through the internet the message, a digital

10 signature, including a digital signature , of the message and the handshaking and delivery
history of the message received by the server from the agent.

91. A method as set forth in claim 90 wherein

the server receives from the sender a copy of the information previously sent by the

server to the sender, this information including the digital signature and the message, when
the sender wishes to have the message authenticated by the server and wherein

5 the server does not retain a copy of the any of the information transmitted from the
server to the sender, after the server transmits to the sender through the internet the
message, the digital signature of the message and the handshaking and delivery history
of the message.

92. A method as set forth in claim 91 wherein

the server receives from the sender the information previously transmitted by the

server to the sender and wherein

5 the server uses the information received by the server from the sender to create a
digital signature and compares this digital signature with the digital signature received by
the server from the sender to authenticate the message received by the server from the
sender.

97. A method as set forth in claim 93, including the steps at the server of:

receiving from the sender at the server through the internet, at the same time as the receipt of a copy of the message from the sender to the server, a copy of any attachment to the message, and

5 providing for a transmittal from the agent to the server through the internet of [the digital signature, including the digital fingerprint, of] the attachment at the same time as the transmittal of the message from the agent to the server.

98. In a method of transmitting a message through the internet from a sender to

a recipient through a server displaced from the recipient, the steps at the server of:

receiving the message at the server from the recipient,

generating a hash constituting a synopsis of the message in coded form,

5 encrypting the hash with a particular encryption code to generate a digital signature of the message, and

transmitting the message and the digital signature of the message through the internet to the sender.

99. In a method as set forth in claim 98, the steps at the server of:
generating, for any attachment to the message, a hash constituting a synopsis of
the attachment in coded form,

5 encrypting the hash with a particular encryption code to generate a digital signature
of the attachment, and

transmitting the attachment and the digital signature of the attachment to the sender
through the internet at the same time that the message and the digital signature of the
message are transmitted from the server to the sender through the internet.

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100. In a method as set forth in claim 98, the steps at the server of:

removing the message and the digital signature of the message from the server
after the transmission of the message and the digital signature of the message from the
server to the sender.

101. In a method as set forth in claim 99, the steps at the server of:

removing the message and the digital signature of the message from the server
after the transmission of the message and the digital signature of the message from the
server to the sender, and

5 removing the attachment, and the digital signature of the attachment, from the
server after the transmission of the attachment, and the digital signature of the attachment,
from the server to the sender.

- (Handwritten mark: A stylized 'X' with a vertical line through it, followed by the number '5' and the letters 'EI')*
102. In a method as set forth in claim 98, the step at the server of:
receiving at the server from the sender the message, and the digital signature of the
message, previously transmitted from the server to the sender.
103. In a method as set forth in claim 101, the step of:
authenticating the message on the basis of the message, and the digital signature
of the message, transmitted from the sender to the server.
104. In a method as set forth in claim 102, the step of:
authenticating at the server the message received by the server from the sender on
the basis of the message, and the digital signature of the message, transmitted from the
sender to the server, the authentication being provided by generating the digital signature
5 of the message received by the server from the sender and by comparing the generated
digital signature and the received digital signature.

105. In a method as set forth in claim 103, the step of:

authenticating at the server the message received by the server from the sender on the basis of the message, and the digital signature of the message, transmitted from the sender to the server, the authentication being provided by generating the digital signature of the message received by the server from the sender and by comparing the generated digital signature and the received digital signature and by indicating the authentication when the generated digital signature and the received digital signature are the same.

106. In a method of transmitting a message through the internet from a sender

to an agent for the recipient through a server displaced from the agent, the steps at the server of:

receiving the message at the server from the sender,

transmitting the message and the identity of the sender and the identity and internet address of the server through the internet from the server to the agent,

receiving at the server through the internet any transmission through the internet from the agent concerning the message from the sender, and

determining from the transmission received by the server from the agent, or from the lack of any reception by the server through the internet from the agent, the delivery status of the transmission by the server to the agent and the delivery status of any delivery of the message by the agent to the recipient.

107. In a method as set forth in claim 106, the steps at the server of:

periodically examining the delivery status of the message transmitted to the agent and the status of any delivery of the message by the agent to the recipient, and transmitting the message and the digital signature of the message and the identity of the sender and the identity and internet address of the server through the internet to the sender with an indication of the delivery of the message to the agent when the server determines from the periodic examination that the message has been delivered to the transport agent.

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108. A method of transmitting a message through the internet from a sender to an agent for a recipient through a server displaced from the agent, including the steps at the server of:

receiving the message at the server,

5 transmitting through the internet to an agent of the recipient the message and the identity of the sender and the identity and the internet address of the server,

receiving from the agent the message and the identity and internet address of the agent and the identity of the sender and the identity and internet address of the server,

providing a digital signature of what was received from the agent, and

10 providing to the sender the information received by the server from the agent and the digital signature of the information received by the server.

109. A method as set forth in claim 108, including the steps at the server of:
providing to the sender the message at the same time as the provision of the digital
signature of the message to the sender, and
discarding the message provided to the sender.

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110. A method as set forth in claim 108, including the steps at the server of:
receiving from the agent [providing] an indication of the date and time of the
reception by the agent of the identity and internet address of the agent and the identity of
the sender and the identity and the internet address of the server, and
5 providing to the sender the indication of the date and time of the reception by the
agent of the identity and internet address of the agent and the identity of the sender and
the identity and internet address of the server.

111. A method as set forth in claim 108, including the steps at the server of:
receiving from the sender a copy of the message provided by the server and a copy
of the digital signature of the message and the identity and internet address of the agent
and the identity of the sender and the identity and internet address of the server,

5 generating a digital signature of what has been received from the sender,
comparing the digital signature received by the sender and the digital signature
generated by the server, and
authenticating the message received from the sender on the basis of the
comparison provided at the server.

112. A method as set forth in claim 108, including the steps at the server of:
forming at the server the digital signature of the message by providing a hash of the
message and then
encrypting the hash of the message.

113. A method as set forth in claim 108, including the steps at the server of:
providing a digital signature of an attachment to the message,
transmitting to the agent the attachment at the same time as the transmittal of the
message, and
5 transmitting to the sender the digital signature of the attachment at the same time
as the transmission of the digital signature of the message to the sender.

114. A method as set forth in claim 112, including the steps at the server of:
providing an indication of the date and time of the reception of the message from
the agent, and
providing to the sender the indication of the date and time of providing to the server
5 the digital signature of the message from the agent at the time of providing to the sender
the digital signature of the message,
providing to the sender the message at the same time as the provision of the digital
signature of the message to the sender, and
discarding the message provided to the sender,
10 providing a digital signature of an attachment to the message,
transmitting to the sender the attachment at the same time as the transmittal of the
message to the sender,
transmitting to the sender the digital signature of the attachment at the same time
as the transmission of the digital signature of the message to the sender,
15 receiving from the sender a copy of the message provided to the sender and a copy
of the digital signature of the message and the identity and internet address of the agent
and the identity of the sender and the identity and internet address of the server,
generating a digital signature of what has been received from the sender relating
to the message,

20 comparing the digital signature received from the sender and the digital signature generated on the basis of what has been received from the sender relating to the message, and

authenticating the message received from the sender on the basis of the comparison provided by the server.

115. In a method of transmitting a message through the internet from a sender to an agent for a recipient through a server displaced from the recipient, the steps at the server of:

receiving the message from the agent,

5 providing at the server a digital signature of the message received from the agent, and

transmitting to the sender the message received from the agent and the digital signature of the message for storage by the sender.

116. In a method as set forth in claim 115, the step at the server of:

discarding the message after the transmission of the message and the digital signature of the message to the sender.

117. In a method as set forth in claim 116 the steps at the server of:
receiving from the sender copies of the message and the digital signature of the
message,
generating a digital signature on the basis of what has been received from the
5 sender,
comparing the digital signature of the message from the sender and the digital
signature generated at the server, and
authenticating the message on the basis of the results of the comparison.

118. In a method as set forth in claim 115,
providing at the server, at the same time as the provision of the digital signature of
the message at the server, the identity of the sender and the identity and internet address
of the server and the identity and internet address of the mail transport agency, all as
5 received by the server from the agent, and
transmitting to the sender the identity of the sender, the identity and internet address
of the server and the identity and internet address of the agent, all as received by the
server from the agent, at the same time as the transmission of the message, and the digital
signature of the message, to the sender.

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119. In a method as set forth in claim 115, the steps at the server of:
receiving an attachment from the agent,
providing at the server a digital signature of the attachment, and
transmitting to the sender, at the same time as the transmission of the message and
the digital signature of the message, the attachment and the digital signature of the
attachment.

120. In a method as set forth in claim 119, the steps at the server of:
receiving from the sender copies of the message and the attachment of the
message,
generating digital signatures of the message and the attachment from the message
and the attachment received by the server from the sender, and
respectively comparing the received digital signatures of the message and the
attachment and the digital signatures generated at the server of the message and the
attachment on the basis of what has been received from the sender to authenticate the
message and the attachment on the basis of this comparison.

121. In a method as set forth in claim 119, the steps at the server of receiving at the server from the agent, at the same time as the reception of the message and the attachment of the message from the agent, the identity of the sender and the identity and internet address of the server and the identity and internet address of the agent, all as received by the server from the agent,

transmitting to the sender the identity of the sender, the identity and internet address of the server, and the identity and internet address of the agent, all as received by the server from the agent, at the same time as the transmission to the sender of the message and the attachment and the digital signature of the message and of the attachment to the sender.

122. A method of transmitting a message through the internet from a sender to an agent for a recipient through a server displaced from the agent, including the steps of providing the message from the sender at the server, transmitting to the agent the message and the identity of the sender and the identity and the internet address of the server, providing at the agent an indication of the status of the reception at the agent of the transmittal from the server to the agent of the message and the identity of the sender and the identity and internet address of the server, transmitting to the server from the agent the message and the identity and internet address of the agent and the status of the reception at the agent of the message and the identity of the sender and the identity and internet address of the server, and providing at the server a digital signature of what has been received by the server from the agent.

123. A method as set forth in claim 122, including the steps of:

providing an attachment to the message,

transmitting the attachment to the agent at the same time as the transmittal of the message to the agent,

5 providing at the agent the status of the reception of the attachment at the same time

as the provision at the agent of the status of the reception of the message,

B/S transmitting to the server from the agent the status of the reception of the attachment at the same time as the transmittal to the server from the agent of the status of the reception of the message, and

10 providing at the server a digital signature of the attachment.

124. A method as set forth in claim 122 wherein

the digital signature of the message includes a digital digest of the message and an encryption of the digital digest.

E 126. A method as set forth in claim 122 wherein

B/S the server transmits to the sender the message and the identity of the sender and the identity and internet address of the server and the identity and internet address of the agent and the status at the agent of the reception at the agent of the message and the 5 digital signature of what has been received by the server from the agent.

128. A method as set forth in claim 122 wherein
the digital signature of the message includes a digital digest of the message and an
encryption of the digital digest,

the agent includes the date and time of the transmission by the agent to the server,

5 and

the server transmits to the sender the message and the digital signature of the
message and the identity of the sender and the identity and internet address of the server
and the identity and internet address of the agent and the delivery status of the message,
and

10 the delivery status of the message at the agent includes at least one of the following:

(a) DELIVERED, (b) RELAYED, (c) DELIVERED-AND-WAITING FOR DELIVERY
STATUS NOTIFICATION (DSN), (d) DELIVERED-TO-MAILBOX, and (e) FAILED,
UNDELIVERABLE.

129. A method as set forth in claim 128, including the steps of:
providing at the server an attachment to the message,
transmitting the attachment to the message to the agent at the same time as the
transmittal of the message to the agent,
providing at the agent the status of the reception of the attachment at the same time
as the provision at the agent of the status of the reception of the message, and
transmitting to the server from the agent the status of the reception of the
attachment at the same time as the transmittal to the server from the agent of the status
of the reception of the message.

130. A method of transmitting a message through the internet from a sender to an agent for a recipient through a server displaced from the agent, including the steps at the server of:

providing at the server the message and the identity of the sender and the identity and internet address of the server,

transmitting to the agent the message and the identity of the sender and the identity and internet address of the server,

receiving from the agent the message and the identity of the sender and the identity and internet address of the server and the identity and internet address of the agent and an indication of the status of the reception of the message at the agent, and

transmitting to the sender the message and the information received by the server from the agent relating to the message.

131. A method as set forth in claim 130, including the steps at the server of:

transmitting to the agent an attachment at the same time that the message is transmitted to the agent,

receiving from the agent the status of the reception at the agent of the attachment at the same time that the server receives from the agent the status of the reception at the agent of the message, and

transmitting to the sender the attachment and the information received by the server from the agent relating to the attachment at the same time that the server transmits to the sender the message and the information received by the server from the agent relating to the message.

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134. A method as set forth in claim 133 wherein

the server also transmits to the sender the date and time of the transmission to the sender of the status of the reception by the agent of the attachment.

E1 Sub 1 136. A method as set forth in claim 134 wherein

the server transmits to the sender the identity of the sender and the identity and internet address of the server at the same time that it transmits the message to the sender and wherein

5 the server authenticates the message on the basis of what it has received from the sender.

X 137. A method as set forth in claim 134 wherein

the server transmits to the sender the identity and internet address of the agent and the status of the reception of the message, all as received by the server from the agent, and the digital signature of the message and wherein

50 the sender sends to the server, at the time that the sender wishes to have the message authenticated, what it has received from the sender and wherein

the server authenticates the message on the basis of what it has received from the sender after the sender wishes to have the message authenticated.

138. A method as set forth in claim 136 wherein
the server does not store the message after it transmits the message to the sender

and wherein

the server transmits to the sender the message and the identity and internet address
of the agent and the status of the reception of the message received by the agent, all as
received by the server from the agent, and the digital signature of the message, and
wherein

the server authenticates the message solely on the basis of what it has received
from the sender after the sender desires to authenticate the message.

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139. A method of authenticating a message transmitted through the internet from a sender to a recipient through a server displaced from the recipient, including the steps at the server of:

transmitting to the sender the message and a digital signature of the message, and

5 a status of the reception of the message by an agent for the recipient,

receiving from the sender the message, the digital signature of the message and the status of the reception of the message by the agent,

producing a digital signature of the information received from the sender, and

comparing the digital signature of the message produced from the information 10 received from the sender and the digital signature of the message generated by the server from the sender to authenticate the message transmitted from the sender to the server.

140. A method as set forth in claim 139 wherein

the server does not store the information, including the message, transmitted from the server to the sender after the server transmits the information to the sender.

E1 141. A method as set forth in claim 139 wherein

B1 the server provides, in determining the digital signature, the identity of the sender
and the identity and the internet address of the server, and wherein

5 the server transmits to the sender the identity of the sender and the identity and
internet address of the server, all as transmitted by the agent to the server and wherein

the server receives from the sender the identity and internet address of the server
and wherein

10 the server includes the identity of the sender and the identity and internet address
of the server in producing the digital signature of the information from the sender and
wherein

the server compares the digital signature from the sender and the digital signature
generated by the server from the information received by the server from the sender to
authenticate the message transmitted by the sender to the server.

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142. A method of authenticating a message transmitted through the internet from a sender to an agent for a recipient through a server displaced from the agent, including the steps of:

transmitting to the sender the message and a digital signature of the message and a status of a reception by an agent for the recipient of the message,
receiving at the server the information transmitted by the sender to the server,
generating a digital signature of the information received by the server, and
comparing the digital signature generated by the server from the information received by the server from the sender and the digital signature of the message transmitted by the sender to the server to authenticate the message transmitted from the sender to the server.

144. A method as set forth in claim 142 wherein

the server transmits to the sender the identity of the sender and the identity and

internet address of the server at the same time that it transmits the message and the digital
signature of the message to the sender and wherein

5 the sender transmits to the server the identity of the sender and the identity and the

internet address of the server at the same time that it transmits the message and the digital
signature of the message to the server and wherein

the server authenticates the message on the basis of the information that it receives

from the sender.

145. A method of transmitting a message through the internet from a sender to

an agent for a recipient through a server displaced from the agent, including the steps at
the server of,

receiving the message from the sender,

5 transmitting to the agent the message and a return address identifying the sender
and the recipient,

receiving from the agent the message and the identity of the sender and the
recipient, and

identifying the message transmitted from the server to the agent and received by

10 the server from the agent and identifying the message, the sender and the recipient.

146. A method as set forth in claim 145 wherein

the server transmits to the sender the message and the identity of the sender and
the recipient and wherein

the server receives from the sender the message and the identity of the sender and

5 the recipient and wherein

the server authenticates the message on the basis of information transmitted by the
sender to the server after the receipt of the information by the server from the agent.

147. A method as set forth in claim 146 wherein
the server does not retain the message after it transmits the message to the sender.

148. A method as set forth in claim 145 wherein
the recipient is one of a plurality of recipients receiving the message from the server
and wherein
the return address identifies the recipient from among the recipients in the plurality.

149. A method as set forth in claim 145 wherein
the message has an attachment and wherein
the return address also identifies the attachment to the message.

150. A method as set forth in claim 146 wherein

the server does not retain the message after it transmits the message to the sender

and wherein

the recipient is one of a plurality of recipients receiving the message from the server

and wherein

the return address identifies the recipient from among the recipients in the plurality

and wherein

the message has an attachment and wherein

the return address also identifies the attachment to the message.

151. In a method of identifying a sender's message transmitted from a server to

an agent for a recipient, the steps at the server of:

transmitting to the sender a return address received by the server from the agent

and identifying the message, the sender and the recipient,

5 receiving from the sender the return address transmitted by the server to the sender

and identifying the message, the sender and the recipient, and

authenticating the message on the basis of the information transmitted by the

sender to the server.

152. In a method as set forth in claim 151 wherein
the server transmits to the sender the message at the same time that it transmits
the return address to the sender and wherein
the server does not retain the message after it transmits the message to the sender.

153. In a method as set forth in claim 151 wherein
the recipient is an individual one of a plurality of recipients receiving the message
from the server and wherein
the return address identifies the individual one of the recipients in the plurality
receiving the message.

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154. In a method as set forth in claim 151 wherein
the message has an attachment and wherein
the return address identifies the attachment to the message.

155. In a method as set forth in claim 152 wherein
the recipient is an individual one of a plurality of recipients receiving the message
from the server and wherein

the return address identifies the individual one of the recipients in the plurality
receiving the message and wherein
the message has an attachment and wherein
the return address identifies the attachment to the message.

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156. A method of transmitting a message through the internet from a sender to
an agent for a recipient through a server displaced from the recipient, including the steps
at the agent of:

receiving from the server through the internet the message and the identity of the
5 sender and the identity and internet address of the server, and
providing for a transmittal to the server through the internet the message and the
identity of the sender and the identity and internet address of the sender and the identity
and internet address of the agent.

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157. A method as set forth in claim 156, including the step at the agent of:
indicating in the transmittal from the agent to the server whether or not the message
has been delivered by the agent to the recipient.

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158. A method as set forth in claim 156, including the step at the agent of:
indicating in the transmittal from the agent to the server that the message and [the
digital signature, of the message and] the identity of the sender and the identity and
internet address of the server have been sent by the agent to another agent for delivery
to the recipient.

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159. A method of providing a delivery at a first server of an electronic message
from the first server to a destination address, including the steps of:

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receiving at the first server an electronic message from a message sender for
routing to the destination address,
transmitting the electronic message from the first server to a destination server for
the destination address via a protocol selected from a group consisting of an SMTP and
an ESMTP protocol, and
recording at the first server the transactions between the first server and the
destination server in the selected one of the protocols.

160. A method as set forth in claim 159, including the steps of:

including in the transactions between the first server and the destination server via
the selected protocol the identity of the sender, the identity and internet address of the first
server and the identity and internet address of the destination server.

161. A method as set forth in claim 159, including the steps of:
providing transactions between the first server and the sender,
including, in the transactions between the first server and the sender, a digital
signature of the transmission of the electronic message between the first server and the
destination server via the selected protocol.

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162. A method as set forth in claim 159, including the step of:
recording, in the transactions between the first server and the destination server via
the selected protocol, the time for the sending of the message from the first server to the
destination server and the time for the receipt of the message by the destination server.

163. A method as set forth in claim 160, including the steps of:
providing transactions between the first server and the sender, and
including, in the transactions between the first server and the sender a digital
signature of the transmission of the electronic message between the first server and the
destination server via the selected protocol, and
recording, in the transactions between the first server and the destination server via
the selected protocol the time for the sending of the message from the first server to the
destination server and the time for the receipt of the message by the destination server.

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E1 E1 164. A method as set forth in claim 159, including the step of:

E1 E1 including in the transactions between the first server and the destination server via the selected protocol the status of the delivery of the message to the destination server from the recipient.

E1 E1 165. A method as set forth in claim 159, including the step of:

E1 E1 B90 receiving at the first server a notification relating to the status of the delivery of the message to the destination server via the selected protocol and the delivery of the message from the destination server to the recipient via the selected protocol.
end

E1 E1 166. In a method of verifying at a first server a delivery of an electronic message

E1 E1 B90 to a destination server for a recipient, the steps of:

E1 E1 transmitting the electronic message from the first server to the destination server through a transaction between the first server and the destination server via a protocol

5 selected from the group consisting of an SMTP protocol and an ESMTP protocol, and

E1 E1 transmitting from the first server to the sender the message and the transactions between the first server and the destination server in the selected one of the protocols.

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168. In a method as set forth in claim 166, the step of:

releasing the message at the first server after the transmission of the message in
the selected one of the protocols by the first server to the destination server.

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169. In a method as set forth in claim 166, the steps of:

providing at the first server a digital signature of the message, and

transmitting the digital signature of the message from the first server to the sender
at the time of the transmission of the transaction in the selected one of the protocols from
5 the first server to the sender.

E1550 XPS
170. In a method as set forth in claim 169, the steps of:

transmitting from the first server to the sender a copy of the message at the time of
the transmission of the transaction between the first server and the destination server in
the selected one of the protocols, and

5 releasing the message at the first server after the transmission of the copy of the
message in the selected one of the protocols by the first server to the destination server.

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BPA end
171. In a method as set forth in claim 170, the step of:

transmitting between the first server and the destination server the identity of the sender, the identity and address of the first server and the identity and address of the destination server and the time of the receipt of the message by the first server at the time 5 of the transmission of the message from the first server to the sender.

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173. In a method of verifying at a first server a message received by the first server from a sender and transmitted by the first server to a destination server for a recipient, the steps of:

receiving at the first server from the sender transactions between the first server and 5 the destination server relating to the message from the sender, the transactions between the first server and the destination server being provided via a protocol selected from the group consisting of an SMTP protocol and an ESMTP protocol,

transmitting from the first server to the sender the message and the transactions between the first server and the destination server via the selected one of the SMTP 10 protocol and the ESMTP protocol,

transmitting from the sender to the first server the message and the transactions in the selected one of the protocols, and

authenticating the message on the basis of the message and the transactions transmitted from the sender to the first server in the selected one of the protocols.

174. In a method as set forth in claim 173, the step of:

authenticating the message transmitted from the sender to the first server when the comparison is available.

175. In a method as set forth in claim 170, the step of:

removing the message from the first server when the first server transmits to the sender the message and the transactions between the first server and the destination server via the selected one of the SMTP protocol and the ESMTP protocol.

176. In a method as set forth in claim 173, the steps of:

receiving at the first server the indication of the identity of the sender, the identity and address of the first server and the identity and address of the destination server via the protocol selected from the group consisting of the SMTP protocol and the ESMTP protocol, and

transmitting from the first server to the sender the identity of the sender, the identity and address of the first server and the identity and address of the destination server at the time of the transmission from the first server to the sender of the message and the transaction between the first server and the destination server via the protocol selected from the group consisting of the SMTP protocol and the ESMTP protocol.

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end

177. In a method as set forth in claim 175, the steps of
providing at the first server a digital signature of the message and the transactions
between the first server and the destination server relating to the message from the
sender, the transactions between the first server and the destination server being provided
via a protocol selected from the group consisting of an SMTP protocol and an ESMTP
protocol,
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transmitting from the first server to the sender the message and the digital signature
of the message and the transactions between the first server and the destination server
via the selected one of the SMTP protocol and the ESMTP protocol,
10 transmitting the message from the first server to the sender and the [a] digital
signature of the message at the same time that the first server transmits to the sender the
transactions between the first server and the destination server via the selected one of the
SMTP protocol and the ESMTP protocol.

178. In a method as set forth in claim 173, the steps of:

transmitting from the first server to the sender the identity of the sender, the identity and address of the first server and the identity and address of the destination server at the time that the message and the transactions between the first server and the destination server are transmitted from the first server to the sender,

transmitting from the sender to the first server the information transmitted from the first server to the sender, and

authenticating the message at the first server on the basis of the information transmitted from the sender to the first server and representing the information previously transmitted from the first server to the sender.

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179. A method of verifying delivery at a first server of an electronic message to
a destination server for a recipient, including the steps of:
receiving at the first server an electronic message from a message sender for
routing to the destination server,
5 establishing at the first server a communication with the destination server,
transmitting from the first server the electronic message to the destination server
with a protocol transaction via a protocol selected from a group consisting of an SMTP
protocol and an ESMTP protocol,
recording at the first server the protocol transactions between the first server and
10 the destination server relating to the message,
transmitting from the first server to the sender the message and the protocol
transactions between the first server and the destination server,
transmitting from the sender to the first server the message and the protocol
transaction previously transmitted from the first server to the sender, and
15 authenticating the message at the first server on the basis of the message and the
protocol transactions transmitted from the sender to the first server.

180. A method as set forth in claim 178 wherein
the message and the at least particular portion of the transactions provided in the
selected one of the protocols to the sender are thereafter provided by the sender to the first
server, and

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the message is authenticated by the first server on the basis of the message and
the at least particular portion of the transactions from the sender to the first server.

181. A method as set forth in claim 178 wherein
a digital signature is made of the message at the first server and wherein
the digital signature is transmitted from the first server to the sender with the
message and the protocol transactions between the first server and the destination server
and wherein

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the digital signature is thereafter provided by the sender to the first server with the
at least particular portion of the transactions in the selected protocol.

182. A method as set forth in claim 180 wherein

the message and the digital signature and the at least particular portion of the transactions provided in the selected protocol to the sender are thereafter provided by the sender to the first server and wherein

5 a digital signature is produced at the first server on the basis of the message and the at least particular portion provided in the selected protocol by the sender to the first server and wherein

B72 the message is authenticated at the first server by establishing an identity between the digital signature produced at the first server and the digital signature received by the

10 first server from the sender.

183. A method of verifying at a first server the delivery of an electronic message from the first server to a destination server for a destination address including the steps of:

receiving at the first server an electronic message from a message sender for routing to the destination server,

5 transmitting from the first server to the destination server for the destination address the electronic message and transactions between the first server and the destination server relating to the electronic message via a protocol selected from the group consisting of an SMTP protocol and an ESMTP protocol,

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end
10 recording at the first server the transactions between the first server and the destination server via the protocol selected from the group consisting of the SMTP protocol and the ESMTP protocol,

transmitting from the first server to the sender the message and the transactions between the first server and the destination server in the selected one of the protocols,

15 receiving at the first server from the sender the messages and the transactions between the first server and the destination server in the selected one of the protocols, and authenticating the message at the first server on the basis of the message received by the first server from the sender and the transactions received by the first server from the sender.